PYXIS U: Packaged air cooled liquid chillers for outdoor installation equipped with scroll compressors and microchannel condensing coils
Cooling capacity: 44 ÷ 284 kW

RANGEEXTENSION

PYXIS U

rcgroupairconditioning

EUROVENT CERTIFIED PERFORMANCE www.eurovent-certification.com

R410A PLATE AC MICRO CHANNEL

MAIN FEATURES
- Air cooled liquid chiller.
- 26 models available, for a wide selection opportunity.
- Average step of 15kW.
- EER up to 2,98.
- ESEER up to 4,22.
- Scroll compressors.
- R410A Refrigerant charge.
- Single or double refrigerant circuit.
- Plate type heat exchangers.
- AC Axial fans.
- Microchannel condensing coils.
- Electronic expansion valve.
- Single air circuit.
- Suitable for outdoor installation.

MAIN BENEFITS
- Units equipped with two scroll compressors for refrigerant circuit to reach a high efficiency.
- Units with single and double refrigerant circuits.
- Microchannel condensing coils in aluminium.
- Low refrigerant charge.
- High ESEER.
- Availability of kit for the reduction and the extreme reduction of the noise.
- Availability of hydronic group with medium discharge head.
- Availability of pumping groups with low, medium, high discharge head (size U4, U5L).
- Availability of total or partial heat recovery system.
- Availability of shell and tube heat exchangers.
- Availability of EC fans.
- Extremely easily of maintenance.
- Complete set of components dedicated to the safety of the unity.
- Eurovent Certification.

MICROCHANNEL CONDENSING COILS
The use of aluminium for the micro-channel condensers manufacture is able to offer the possibility for very light machinery: the coil weight is only 50% compared to traditional copper pipes and aluminium fins of the same capacity.
The reduced air resistance of the micro-channel coils allows to drastically reduce the fans motors electric energy consumption. At the same performances conditions, the micro-channels condensers require up-to less than 75% refrigerant when compared to the traditional heat exchangers.

WORKING LIMITS IN COOLING MODE
Chilled water outlet temperature: -12÷20°C
Ambient temperature: -10÷45°C

rcgroup.it
1 9 6 3 2 0 1 3
fifty**cool**years

MAIN COMPONENTS

FRAMEWORK

- Base, self supporting frame and panelling in steel plate with protective surfaces treatment in compliance with UNI ISO 9227/ASTMB117 and ISO 7253, and painted with epoxy powders.
- Containing box for compressors, evaporator and electrical panel (excluded size U5L);
- Colour: RAL 9002;
- Compartment for electrical panel on unit front for direct access to control and regulation devices.

COMPRESSORS

- Orbiting spiral (SCROLL) hermetic compressors with spiral profile optimized for R410A refrigerant;
- ON / OFF capacity control (0 / 100% each compressor);
- 2-pole 3-phase electric motor with direct on line starting;
- Crankcase heater;
- Electric motor thermal protection via internal winding temperature sensors;
- Equalization system of the lubricant oil for units equipped with 2 compressors operating on the same refrigerating circuit;
- Rubber supports.

EVAPORATOR

- AISI 316 stainless steel plates type, vacuum brazed using copper as brazing material:
  - With single hydraulic circuit for all machines;
  - With single refrigerant circuit for S version machines;
  - With double refrigerant circuit for D version machines.
- Polyurethane insulation foam with closed cell;
- Temperature sensors on water inlet and outlet;
- Factory assembled differential water pressure switch for water flow control (size U1, U2, U3, U4);
- Paddle flow switch for water flow control, supplied in mounting kit (size U5L)
- Antifreeze heater;
- Hydraulic piping insulated with closed cell elastomeric foam;
- The hydraulic connections are carried outside the unit.

CONDENSING COIL

- Microchannel condensing coil in aluminium and they are perfectly suitable for the civil and industrial applications cooling, while the protection function of the oxide layer allows an optimum resistance to corrosion also in case of aggressive ambient conditions;
- Extremely light construction. The coil weight is only 50% compared to traditional copper pipes and aluminum fins of the same capacity;
- Low air side pressure drop and consequentially drastic reduction of the fans motors electric energy consumption;
- High heat exchange efficiency;
- Reduced internal volume capable of reducing the total refrigerant charge. At the same performances conditions, the micro-channels condensers require up-to less than 75% refrigerant when compared to the traditional heat exchangers;
- Single air circuit;
- Frame in painted galvanized steel.

FANS SECTION

- Axial fans with sickle-shaped blades, fan guard and optimized for low noise levels;
- External rotor AC type electric motor with stepless variable speed for condensing pressure control;
- IP54 enclosure class.

REFRIGERANT CIRCUIT

Components for each refrigerant circuit:

- Thermostatic expansion valve;
- Sight glass;
- Electromagnetic valve on liquid line;
- Filter dryer on liquid line;
- Service valve on liquid line upstream the filter dryer. The valve is present only with exchangeable cartridge filter;
- Service valve on gas discharge;
- Safety valves on high and low pressure side;
- Pressure transducers with indication, control and protection functions, on low and high refrigerant pressure;
- High pressure safety switch with manual reset;
- Refrigerant circuit with copper tubing with insulation of the suction line;
- Plastic capillary hoses for pressure sensors connection;
- R410A refrigerant charge.

ELECTRICAL PANEL

In accordance with EN60204-1 norms, suitable for outdoor installation, complete with:

- Main switch with door lock safety on frontal panel;
- Magnetothermic switches or fuses for each compressor;
- Magnetothermic switches for each fan motor and water pump (if scheduled).
- Contactors for each compressor motor;
- Transformer for auxiliary circuit and microprocessor supply;
- Machine operating mode selector “Loc – Off - Remote”:
- Loc position: Machine is active;
- Off position: Machine is deactivated;
- Remote position: The machine is remotely controlled with a command by the Customer. Electric connections in the terminal.
- Terminals:

OUTLETS

- Voltage free deviating contact for General Alarm 1.

INLETS

- External enabling (from timer, etc. At Customer care);
- Remote control (from operating mode selector. At Customer care);
- Emergency unit stop with signalling on display (external alarm. At Customer care).;

- Panel with machine controls;
- Power supply:
  400V / 3Ph / 50Hz + N for machine size U1, U2;
  400V / 3 Ph / 50Hz for machine size U3, U4, U5L.

CONTROL SYSTEM

- Microprocessor control system with graphic display for control and monitor of operating and alarms status. The system includes:
  - Clock card for alarms date and time displaying and storing;
  - Predisposition for the memorization of the intervened alarms;
  - Predisposition for connectivity board housing (RCcom MBUS/JBUS, LON, BACnet for Ethernet (SNMP- TCP/IP), BACnet for MS/TP). The electronic cards are optional accessories;
  - Main components hour-meter;
  - Non-volatile “Flash” memory for data storage in case of power supply faulty;
  - Analogue set point compensation (0÷1 Vdc) according to an external analogue signal at Customer care;
  - Menu with protection password;
  - LAN connection.

OPTIONAL ACCESSORIES

PYXIS U VERSION SIZE	S U1	D U1	S U2	D U2	S U3	D U3	S U4	D U4	D U5L
752 - Hydronic group (1 pump)	●	●	●	●	●	●	-	-	-
753 - Hydronic group (2 pumps)	●	●	●	●	●	●	-	-	-
722 - Low discharge head single pump	-	-	-	-	-	-	●	●	●
723 - Low discharge head twin pump	-	-	-	-	-	-	●	●	●
720 - Medium discharge head single pump	-	-	-	-	-	-	●	●	●
721 - Medium discharge head twin pump	-	-	-	-	-	-	●	●	●
720 - High discharge head single pump	-	-	-	-	-	-	●	●	●
721 - High discharge head twin pump	-	-	-	-	-	-	●	●	●
727 - Water tank + 1 pump with low discharge head	-	-	-	-	-	-	●	●	●
728 - Water tank + 2 pumps with low discharge head	-	-	-	-	-	-	●	●	●
725 - Water tank + 1 pump with medium discharge head	-	-	-	-	-	-	●	●	●
726 - Water tank + 2 pumps medium discharge head	-	-	-	-	-	-	●	●	●
729 - Water tank + 1 pump with high discharge head	-	-	-	-	-	-	●	●	●
730 - Water tank + 2 pumps with high discharge head	-	-	-	-	-	-	●	●	●
1004 - Antifreezing heater for pumping group	●	●	●	●	●	●	●	●	●
150 - LNO kit (noise reduction)	●	●	●	●	●	●	●	●	●
151 - ELN kit (extremely noise reduction)	-	-	-	-	●	●	●	●	●
170 - Spring antivibration holders (kit)	●	●	●	●	●	●	●	●	-
171 - Rubber antivibration holders (kit)	●	●	●	●	●	●	●	●	●
118 - Kit brine A (for glycol solution production up to -6°C)	●	●	●	●	●	●	●	●	●
119 - Kit brine B (for glycol solution production up to -12°C)	●	●	●	●	●	●	●	●	●
79 - Electrical panel heating system	●	●	●	●	●	●	●	●	●
101 - EC fan	-	-	-	-	●	●	●	●	●
450 - Partial heat recovery	●	-	●	-	●	●	●	●	●
449 - Voltage free contact for partial heat recovery water pump activation	●	-	●	-	●	-	●	-	●
451 - 100% heat recovery	●	●	●	●	●	●	●	●	●
454 - Voltage free contact for total heat recovery water pump activation	●	●	●	●	●	●	●	●	●
459 - Shell and tube evaporator	-	-	-	-	●	●	●	●	-
460 - Shell and tube evaporator for low temperature	-	-	-	-	●	●	●	●	-
350 -Kit TK PRO corrosion resistant painting treatment	●	●	●	●	●	●	●	●	●
250 - Coils protection nets (kit)	●	●	●	●	●	●	●	●	●
605 - Compr. power factor capacitor - 0,9	●	●	●	●	●	●	●	●	●
1002 - Soft Starter	●	●	●	●	●	●	●	●	●
83 - Compressor operation indicator	●	●	●	●	●	●	●	●	●
82 - Magnetothermic switch for each compressor	●	●	●	●	●	●	●	●	●
Service valve on compressor group suction	●	●	●	●	●	●	●	●	●
88 - Analog set point compensation	●	●	●	●	●	●	●	●	●
217 - Double safety valve	●	●	●	●	●	●	●	●	●
224 - Pressure gauge on high and low pressure	●	●	●	●	●	●	●	●	●
220 - Electronic Expansion valve	●	●	●	●	●	●	●	●	●
Electronic Expansion valve energy reserve module	●	●	●	●	●	●	●	●	●
Ambient temperature sensor	●	●	●	●	●	●	●	●	●
85 - Demand limit	●	●	●	●	●	●	●	●	●
81 - Phases sequence control	●	●	●	●	●	●	●	●	●
651 - Special power supply 230/3/50 Hz	●	●	●	●	-	-	-	-	-
1003 - Analogic flowmeter	●	●	●	●	●	●	●	●	●
1005 - Power supply analyzer	●	●	●	●	●	●	●	●	●
1009 - Multimeter kit	●	●	●	●	●	●	●	●	●
84 - Additional external alarm	●	●	●	●	●	●	●	●	●
923 - RC-Com MBUS/JBUS Serial board	●	●	●	●	●	●	●	●	●
926 - LON Serial board	●	●	●	●	●	●	●	●	●
931 - BACnet Ethernet - SNMP - TCP/IP Serial board	●	●	●	●	●	●	●	●	●
932 - BACnet MS/TP Serial board	●	●	●	●	●	●	●	●	●
Espansion card 1	●	●	●	●	●	●	●	●	●
Espansion card 2	●	●	●	●	●	●	●	●	●
930 - Remote graphic terminal kit	●	●	●	●	●	●	●	●	●
962 - Kit modem GSM	●	●	●	●	●	●	●	●	●
957 - Plantwatch without modem	●	●	●	●	●	●	●	●	●
889 - Master plant SEQUENCER	●	●	●	●	●	●	●	●	●
RC CLOUD PLATFORM	●	●	●	●	●	●	●	●	●

● available accessory; - not available accessory

TECHNICAL DATA PYXIS U

	PYXIS U		46 P2 S	46 P2 D	54 P2 S	54 P2 D	58 P2 S	58 P2 D	66 P2 S	66 P2 D
	SIZE		U1	U1	U1	U1	U1	U1	U2	U2
STANDARD	Cooling capacity (1)	kW	44,9	44,9	51,1	51,2	58,4	58,4	65,7	65,7
	Unit power input	kW	15,3	15,3	18,4	18,5	20,9	20,9	23,2	23,5
	Evaporator water flow rate	m³/h	7,7	7,7	8,8	8,8	10,0	10,0	11,3	11,3
	Evaporator pressure drop	kPa	49	52	50	51	55	53	48	57
	Compressors		scroll	scroll	scroll	scroll	scroll	scroll	scroll	scroll
	Quantity	n.	2	2	2	2	2	2	2	2
	Capacity steps	n.	2	2	2	2	2	2	2	2
	Axial fans	n.	4	4	4	4	4	4	4	4
	Total air flow	m³/h	15200	15200	15200	15200	19000	19000	19500	19500
	Air circuits	n.	1	1	1	1	1	1	1	1
	Refrigerant		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Total refrigerant charge (optional excluded)	kg	5,1	4,9	5,3	5,1	5,5	5,3	7,3	7,9
	Gas circuits	n.	1	2	1	2	1	2	1	2
	Power supply	V/Ph/Hz	400/3/50+N	400/3/50+N	400/3/50+N	400/3/50+N	400/3/50+N	400/3/50+N	400/3/50+N	400/3/50+N
	Max unit operating current (FLA)	A	46,7	46,7	48,8	48,8	57,4	57,4	70,0	70,0
	Unit starting current (LRA)	A	134,5	134,5	142,5	142,5	147,7	147,7	175,7	175,7
	EER (1)	kW/kW	2,93	2,93	2,77	2,77	2,79	2,79	2,83	2,80
	ESEER		4,15	3,64	4,17	3,55	4,07	3,55	4,09	3,53
	Sound power level [Lw] (2)	dB(A)	84,0	84,0	84,0	84,0	84,3	84,3	85,1	85,1
	Average sound pressure level [LPm] (3)	dB(A)	67,0	67,0	67,0	67,0	67,3	67,3	67,7	67,7
	Net weight	kg	530	530	530	530	539	539	642	642
	Hydraulic connections									
	Evaporator IN/OUT - ISO 7/1 – R	Ø	2"	2"	2"	2"	2"	2	2"	2"
	Evaporator IN/OUT - OD (4)	Ø mm	--	--	--	--	--	--	--	--
OPTIONAL	Partial heat recovery - Heating capacity (5)	kW	16,5	--	18,8	--	21,4	--	24,1	--
	Total heat recovery - Heating capacity (6)	kW	58,4	59,1	68,3	69,3	77,0	78,1	86,6	88,1
	EC axial fans - Power input	Pa	--	--	--	--	--	--	--	--
	Pumping group									
	Low discharge head - Power input	kW	--	--	--	--	--	--	--	--
	Medium discharge head - Power input	kW	0,75	0,75	0,75	0,75	0,75	0,75	1,5	1,5
	High discharge head - Power input	kW	--	--	--	--	--	--	--	--
	Water tank - volume	l	150	150	150	150	150	150	240	240
LNO KIT 100%	Cooling capacity (1)	kW	44,9	44,9	51,1	51,2	58,4	58,4	65,7	65,7
	Unit power input	kW	15,3	15,3	18,4	18,5	20,9	20,9	23,2	23,5
	Total air flow	m³/h	15200	15200	15200	15200	19000	19000	19500	19500
	EER (1)	kW/kW	2,93	2,93	2,77	2,77	2,79	2,79	2,83	2,80
	Sound power level [Lw] (2)	dB(A)	78,6	78,6	78,6	78,6	79,0	79,0	79,8	79,8
	Average sound pressure level [LPm] (3)	dB(A)	61,6	61,6	61,6	61,6	62,0	62,0	62,4	62,4
LNO KIT 85%	Cooling capacity (1)	kW	43,8	43,8	49,5	49,5	56,8	56,7	63,6	63,7
	Unit power input	kW	15,8	15,8	19,3	19,3	21,7	21,6	24,2	24,2
	Total air flow	m³/h	12920	12920	12920	12920	16150	16150	16575	16575
	EER (1)	kW/kW	2,77	2,77	2,57	2,57	2,62	2,62	2,63	2,63
	Sound power level [Lw] (2)	dB(A)	75,6	75,6	75,6	75,6	75,8	75,8	76,7	76,7
	Average sound pressure level [LPm] (3)	dB(A)	58,6	58,6	58,6	58,6	58,8	58,8	59,2	59,2
LNO KIT 70%	Cooling capacity (1)	kW	42,2	42,2	47,2	47,2	54,4	54,3	60,7	60,6
	Unit power input	kW	16,6	16,6	20,4	20,4	22,9	22,9	25,5	25,6
	Total air flow	m³/h	10640	10640	10640	10640	13300	13300	13650	13650
	EER (1)	kW/kW	2,54	2,54	2,31	2,31	2,38	2,37	2,38	2,37
	Sound power level [Lw] (2)	dB(A)	73,0	73,0	73,0	73,0	72,7	72,7	73,8	73,8
	Average sound pressure level [LPm] (3)	dB(A)	56,1	56,1	56,1	56,1	55,7	55,7	56,4	56,4
ELN KIT	Cooling capacity (1)	kW	--	--	--	--	--	--	--	--
	Unit power input	kW	--	--	--	--	--	--	--	--
	Total air flow	m³/h	--	--	--	--	--	--	--	--
	EER (1)	kW/kW	--	--	--	--	--	--	--	--
	Sound power level [Lw] (2)	dB(A)	--	--	--	--	--	--	--	--
	Average sound pressure level [LPm] (3)	dB(A)	--	--	--	--	--	--	--	--

1. Referred to chilled water temperature 12/7°C – 0% glycol solution; air temperature to the condenser 35°C. Fouling factor of the exchangers 0,043 m²°K/kW.
2. Sound power level [Lw] according to ISO EN 9614 – 2.
3. Average sound pressure level [LPm] 1m far according to ISO EN 3744.
4. Hydraulic connection with grooved end complete with flexible joint and adapter pipe for solder connection.
5. Referred to chilled water temperature 12/7°C – 0% glycol solution; air temperature to the condenser 35°C; water temperature heat recovery 40/45°C – 0% glycol solution. Fouling factor of the exchangers 0,043 m²°K/kW.
6. Referred to chilled water temperature 12/7°C – 0% glycol solution; water temperature heat recovery 40/45°C – 0% glycol solution; Fouling factor of the exchangers 0,043 m²°K/kW.

TECHNICAL DATA PYXIS U

	PYXIS U		80 P2 S	80 P2 D	102 P2 S	102 P2 D	128 P2 S	128 P2 D	146 P2 S	146 P2 D
	SIZE		U2	U2	U3	U3	U3	U3	U3	U3
STANDARD	Cooling capacity (1)	kW	76,3	76,2	104,0	102,0	123,0	125,0	138,0	138,0
	Unit power input	kW	27,4	27,3	35,9	35,7	44,7	44,8	52,3	52,3
	Evaporator water flow rate	m³/h	13,1	13,1	17,9	17,3	21,2	21,5	23,7	23,8
	Evaporator pressure drop	kPa	51	37	47	47	49	46	50	56
	Compressors		scroll	scroll	scroll	scroll	scroll	scroll	scroll	scroll
	Quantity	n.	2	2	2	2	2	2	2	2
	Capacity steps	n.	2	2	2	2	2	2	2	2
	Axial fans	n.	6	6	2	2	2	2	2	2
	Total air flow	m³/h	22800	22800	34000	34000	42360	42360	42360	42360
	Air circuits	n.	1	1	1	1	1	1	1	1
	Refrigerant		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Total refrigerant charge (optional excluded)	kg	7,7	8,4	10,5	11,5	12,3	12,3	12,3	12,5
	Gas circuits	n.	1	2	1	2	1	2	1	2
	Power supply	V/Ph/Hz	400/3/50+N	400/3/50+N	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
	Max unit operating current (FLA)	A	75,3	75,3	91,4	88,7	110,0	110,0	127,8	127,8
	Unit starting current (LRA)	A	211,7	211,7	269,5	269,5	328,3	328,3	366,3	366,3
	EER (1)	kW/kW	2,78	2,79	2,90	2,86	2,75	2,79	2,64	2,64
	ESEER		4,03	3,51	4,03	3,56	3,83	3,48	3,80	3,32
	Sound power level [Lw] (2)	dB(A)	86,1	86,1	88,2	88,2	92,2	92,2	92,2	92,2
	Average sound pressure level [Lpm] (3)	dB(A)	68,8	68,8	70,3	70,3	74,0	74,0	74,0	74,0
	Net weight	kg	660	660	870	870	910	910	930	930
	Hydraulic connections									
	Evaporator IN/OUT - ISO 7/1 – R	Ø	2"	2"	--	--	--	--	--	--
	Evaporator IN/OUT - OD (4)	Ø mm	--	--	76,1	76,1	76,1	76,1	76,1	76,1
OPTIONAL	Partial heat recovery - Heating capacity (5)	kW	28,0	--	38,3	--	45,3	--	50,6	--
	Total heat recovery - Heating capacity (6)	kW	102,0	103,0	135,0	134,0	159,0	160,0	182,0	182,0
	EC axial fans - Power input		--	--	--	--	2,6	2,6	2,6	2,6
	Pumping group									
	Low discharge head - Power input	kW	--	--	--	--	--	--	--	--
	Medium discharge head - Power input	kW	1,5	1,5	2,0	2,0	2,0	2,0	2,0	2,0
	High discharge head - Power input	kW	--	--	--	--	--	--	--	--
	Water tank - volume	l	240	240	360	360	360	360	360	360
LNO KIT 100%	Cooling capacity (1)	kW	76,3	76,2	104,0	102,0	123,0	125,0	138,0	138,0
	Unit power input	kW	27,4	27,3	35,9	35,7	44,7	44,8	52,3	52,3
	Total air flow	m³/h	22800	22800	34000	34000	42360	42360	42360	42360
	EER (1)	kW/kW	2,78	2,79	2,90	2,86	2,75	2,79	2,64	2,64
	Sound power level [Lw] (2)	dB(A)	80,6	80,6	82,5	82,5	86,1	86,1	86,1	86,1
	Average sound pressure level [Lpm] (3)	dB(A)	63,2	63,2	64,4	64,4	67,9	67,9	67,9	67,9
LNO KIT 85%	Cooling capacity (1)	kW	74,1	74,0	102,0	99,1	121,0	122,0	134,0	134,0
	Unit power input	kW	28,4	28,2	36,7	36,4	45,8	45,9	53,8	53,8
	Total air flow	m³/h	19380	19380	28900	28900	36000	36000	36000	36000
	EER (1)	kW/kW	2,61	2,62	2,78	2,72	2,64	2,66	2,49	2,49
	Sound power level [Lw] (2)	dB(A)	77,9	77,9	80,6	80,6	84,6	84,6	84,6	84,6
	Average sound pressure level [Lpm] (3)	dB(A)	60,5	60,5	62,5	62,5	66,4	66,4	66,4	66,4
LNO KIT 70%	Cooling capacity (1)	kW	70,9	70,8	98,0	95,6	116,0	118,0	129,0	129,0
	Unit power input	kW	29,8	29,6	38,3	37,9	47,5	47,6	56,3	56,6
	Total air flow	m³/h	15960	15960	23800	23800	29652	29652	29652	29652
	EER (1)	kW/kW	2,38	2,39	2,56	2,52	2,44	2,48	2,29	2,28
	Sound power level [Lw] (2)	dB(A)	75,8	75,8	79,3	79,3	83,6	83,6	83,6	83,6
	Average sound pressure level [Lpm] (3)	dB(A)	58,4	58,4	61,2	61,2	65,5	65,5	65,5	65,5
ELN KIT	Cooling capacity (1)	kW	--	--	98,0	95,6	116,0	118,0	129,0	129,0
	Unit power input	kW	--	--	38,3	37,9	47,5	47,6	56,3	56,6
	Total air flow	m³/h	--	--	23800	23800	29652	29652	29652	29652
	EER (1)	kW/kW	--	--	2,56	2,52	2,44	2,48	2,29	2,28
	Sound power level [Lw] (2)	dB(A)	--	--	77,3	77,3	81,6	81,6	81,6	81,6
	Average sound pressure level [Lpm] (3)	dB(A)	--	--	59,2	59,2	63,5	63,5	63,5	63,5

1. Referred to chilled water temperature 12/7°C – 0% glycol solution; air temperature to the condenser 35°C. Fouling factor of the exchangers 0,043 m²°K/kW.
2. Sound power level [Lw] according to ISO EN 9614 – 2.
3. Average sound pressure level [Lpm] 1m far according to ISO EN 3744.
4. Hydraulic connection with grooved end complete with flexible joint and adapter pipe for solder connection.
5. Referred to chilled water temperature 12/7°C – 0% glycol solution; air temperature to the condenser 35°C; water temperature heat recovery 40/45°C – 0% glycol solution. Fouling factor of the exchangers 0,043 m²°K/kW.
6. Referred to chilled water temperature 12/7°C – 0% glycol solution; water temperature heat recovery 40/45°C – 0% glycol solution; Fouling factor of the exchangers 0,043 m²°K/kW.

TECHNICAL DATA PYXIS U

	PYXIS U		164 P2 S	164 P2 D	186 P2 S	186 P2 D	204 P2 S	204 P2 D	215 P4 D	235 P4 D
	SIZE		U4	U4	U4	U4	U4	U4	U5L	U5L
STANDARD	Cooling capacity (1)	kW	163,0	163,0	181,0	182,0	199,0	200,0	210,0	229,0
	Unit power input	kW	55,8	55,8	65,1	65,0	74,5	74,3	70,5	78,7
	Evaporator water flow rate	m³/h	28,0	28,0	31,2	31,2	34,3	34,3	36,0	39,3
	Evaporator pressure drop	kPa	51	55	52	51	50	48	54	54
	Compressors		scroll	scroll	scroll	scroll	scroll	scroll	scroll	scroll
	Quantity	n.	2	2	2	2	2	2	4	4
	Capacity steps	n.	2	2	2	2	2	2	4	4
	Axial fans	n.	3	3	3	3	3	3	4	4
	Total air flow	m³/h	63540	63540	63540	63540	63540	63540	84720	84720
	Air circuits	n.	1	1	1	1	1	1	1	1
	Refrigerant		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Total refrigerant charge (optional excluded)	kg	12,0	13,7	20,9	23,5	21,4	24,3	19,3	19,6
	Gas circuits	n.	1	2	1	2	1	2	2	2
	Power supply	V/Ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
	Max unit operating current (FLA)	A	149,8	149,8	167,7	167,7	185,7	185,7	189,6	202,2
	Unit starting current (LRA)	A	332,2	332,2	485,1	485,1	502,3	502,3	404,1	416,1
	EER (1)	kW/kW	2,92	2,92	2,78	2,80	2,67	2,69	2,98	2,91
	ESEER		3,96	3,61	3,88	3,50	3,82	3,39	4,22	4,21
	Sound power level [Lw] (2)	dB(A)	93,2	93,2	95,2	95,2	96,2	96,2	87,7	88,8
	Average sound pressure level [LPm] (3)	dB(A)	74,4	74,4	76,5	76,5	77,4	77,4	68,9	70,0
	Net weight	kg	990	1020	1030	1040	1060	1070	1700	1870
	Hydraulic connections									
	Evaporator IN/OUT - ISO 7/1 – R	Ø	--	--	--	--	--	--	--	--
	Evaporator IN/OUT - OD (4)	Ø mm	76,1	76,1	76,1	76,1	76,1	76,1	88,9	88,9
OPTIONAL	Partial heat recovery - Heating capacity (5)	kW	59,8	--	66,5	--	73,1	--	77,0	84,0
	Total heat recovery - Heating capacity (6)	kW	211,0	211,0	239,0	240,0	268,0	269,0	269,0	269,0
	EC axial fans - Power input		3,8	3,8	3,8	3,8	3,8	3,8	5,1	5,1
	Pumping group									
	Low discharge head - Power input	kW	1,5	1,5	1,5	1,5	1,5	1,5	3,0	3,0
	Medium discharge head - Power input	kW	2,2	2,2	2,2	2,2	2,2	2,2	4,0	4,0
	High discharge head - Power input	kW	3,0	3,0	3,0	3,0	3,0	3,0	5,5	5,5
	Water tank - volume	l	200	200	200	200	200	200	190	190
LNO KIT 100%	Cooling capacity (1)	kW	163,0	163,0	181,0	182,0	199,0	200,0	210,0	229,0
	Unit power input	kW	55,8	55,8	65,1	65,0	74,5	74,3	70,5	78,7
	Total air flow	m³/h	63540	63540	63540	63540	63540	63540	84720	84720
	EER (1)	kW/kW	2,92	2,92	2,78	2,80	2,67	2,69	2,98	2,91
	Sound power level [Lw] (2)	dB(A)	87,2	87,2	89,0	89,0	89,7	89,7	81,6	82,2
	Average sound pressure level [LPm] (3)	dB(A)	68,4	68,4	70,2	70,2	71,0	71,0	62,8	63,4
LNO KIT 85%	Cooling capacity (1)	kW	160,0	160,0	177,0	178,0	194,0	194,0	206,0	224,0
	Unit power input	kW	56,7	56,7	66,3	66,4	76,4	76,4	71,3	80,3
	Total air flow	m³/h	54000	54000	54000	54000	54000	54000	72012	72012
	EER (1)	kW/kW	2,82	2,82	2,67	2,68	2,54	2,54	2,89	2,79
	Sound power level [Lw] (2)	dB(A)	85,5	85,5	87,7	87,7	88,8	88,8	80,0	80,9
	Average sound pressure level [LPm] (3)	dB(A)	66,7	66,7	69,0	69,0	70,0	70,0	61,2	62,0
LNO KIT 70%	Cooling capacity (1)	kW	155,0	156,0	171,0	172,0	186,0	187,0	200,0	217,0
	Unit power input	kW	58,5	58,4	68,7	68,8	79,5	79,6	73,3	82,8
	Total air flow	m³/h	44478	44478	44478	44478	44478	44478	59304	59304
	EER (1)	kW/kW	2,65	2,67	2,49	2,50	2,34	2,35	2,73	2,62
	Sound power level [Lw] (2)	dB(A)	84,4	84,4	87,0	87,0	88,3	88,3	79,1	80,1
	Average sound pressure level [LPm] (3)	dB(A)	65,6	65,6	68,3	68,3	69,5	69,5	60,3	61,3
ELN KIT	Cooling capacity (1)	kW	155,0	156,0	171,0	172,0	186,0	187,0	200,0	217,0
	Unit power input	kW	58,5	58,4	68,7	68,8	79,5	79,6	73,3	82,8
	Total air flow	m³/h	44478	44478	44478	44478	44478	44478	59304	59304
	EER (1)	kW/kW	2,65	2,67	2,49	2,50	2,34	2,35	2,73	2,62
	Sound power level [Lw] (2)	dB(A)	82,4	82,4	85,0	85,0	86,3	86,3	77,1	78,1
	Average sound pressure level [LPm] (3)	dB(A)	63,6	63,6	66,3	66,3	67,5	67,5	58,3	59,3

1. Referred to chilled water temperature 12/7°C – 0% glycol solution; air temperature to the condenser 35°C. Fouling factor of the exchangers 0,043 m²°K/kW.
2. Sound power level [Lw] according to ISO EN 9614 – 2.
3. Average sound pressure level [LPm] 1m far according to ISO EN 3744.
4. Hydraulic connection with grooved end complete with flexible joint and adapter pipe for solder connection.
5. Referred to chilled water temperature 12/7°C – 0% glycol solution; air temperature to the condenser 35°C; water temperature heat recovery 40/45°C – 0% glycol solution. Fouling factor of the exchangers 0,043 m²°K/kW.
6. Referred to chilled water temperature 12/7°C – 0% glycol solution; water temperature heat recovery 40/45°C – 0% glycol solution; Fouling factor of the exchangers 0,043 m²°K/kW.

TECHNICAL DATA PYXIS U

	PYXIS U		255 P4 D	305 P4 D
	SIZE		U5L	U5L
STANDARD	Cooling capacity (1)	kW	250,0	284,0
	Unit power input	kW	89,3	104,4
	Evaporator water flow rate	m³/h	43,0	48,8
	Evaporator pressure drop	kPa	54	46
	Compressors		scroll	scroll
	Quantity	n.	4	4
	Capacity steps	n.	4	4
	Axial fans	n.	4	4
	Total air flow	m³/h	84720	84720
	Air circuits	n.	1	1
	Refrigerant		R410A	R410A
	Total refrigerant charge (optional excluded)	kg	19,9	19,9
	Gas circuits	n.	2	2
	Power supply	V/Ph/Hz	400/3/50	400/3/50
	Max unit operating current (FLA)	A	220,1	255,6
	Unit starting current (LRA)	A	433,1	488,0
	EER (1)	kW/kW	2,80	2,72
	ESEER		4,14	4,19
	Sound power level [Lw] (2)	dB(A)	90,0	90,6
	Average sound pressure level [L_{Pm}] (3)	dB(A)	71,2	71,2
	Net weight	kg	1950	2020
	Hydraulic connections			
	Evaporator IN/OUT - ISO 7/1 – R	Ø	--	--
	Evaporator IN/OUT - OD (4)	Ø mm	88,9	88,9
OPTIONAL	Partial heat recovery - Heating capacity (5)	kW	91,8	104,0
	Total heat recovery - Heating capacity (6)	kW	269,0	269,0
	EC axial fans - Power input		5,1	5,1
	Pumping group			
	Low discharge head - Power input	kW	3,0	3,0
	Medium discharge head - Power input	kW	4,0	4,0
	High discharge head - Power input	kW	5,5	5,5
	Water tank - volume	l	190	190
LNO KIT 100%	Cooling capacity (1)	kW	250,0	284,0
	Unit power input	kW	89,3	104,4
	Total air flow	m³/h	84720	84720
	EER (1)	kW/kW	2,80	2,72
	Sound power level [Lw] (2)	dB(A)	82,9	83,6
	Average sound pressure level [L_{Pm}] (3)	dB(A)	64,1	64,1
LNO KIT 85%	Cooling capacity (1)	kW	244,0	275,0
	Unit power input	kW	91,4	107,8
	Total air flow	m³/h	72012	72012
	EER (1)	kW/kW	2,67	2,55
	Sound power level [Lw] (2)	dB(A)	81,8	82,5
	Average sound pressure level [L_{Pm}] (3)	dB(A)	63,0	63,0
LNO KIT 70%	Cooling capacity (1)	kW	235,0	264,0
	Unit power input	kW	94,8	112,8
	Total air flow	m³/h	59304	59304
	EER (1)	kW/kW	2,48	2,34
	Sound power level [Lw] (2)	dB(A)	81,2	81,8
	Average sound pressure level [L_{Pm}] (3)	dB(A)	62,4	62,4
ELN KIT	Cooling capacity (1)	kW	235,0	264,0
	Unit power input	kW	94,8	112,8
	Total air flow	m³/h	59304	59304
	EER (1)	kW/kW	2,48	2,34
	Sound power level [Lw] (2)	dB(A)	79,2	79,8
	Average sound pressure level [L_{Pm}] (3)	dB(A)	60,4	60,4

1. Referred to chilled water temperature 12/7°C – 0% glycol solution; air temperature to the condenser 35°C. Fouling factor of the exchangers 0,043 m²°K/kW.
2. Sound power level [Lw] according to ISO EN 9614 – 2.
3. Average sound pressure level [L_{Pm}] 1m far according to ISO EN 3744.
4. Hydraulic connection with grooved end complete with flexible joint and adapter pipe for solder connection.
5. Referred to chilled water temperature 12/7°C – 0% glycol solution; air temperature to the condenser 35°C; water temperature heat recovery 40/45°C – 0% glycol solution. Fouling factor of the exchangers 0,043 m²°K/kW.
6. Referred to chilled water temperature 12/7°C – 0% glycol solution; water temperature heat recovery 40/45°C – 0% glycol solution; Fouling factor of the exchangers 0,043 m²°K/kW.

DIMENSIONS (mm)

SIZE U	a	b	c
U1	2030	1200	1630
U2	2610	1200	1630
U3	3050	1200	1950
U4	4110	1200	1950
U5L	4940	1800	1965